Golden Stairs Retaining Wall
Beneath Going-to-the-Sun Road, approximately
forty-three miles northeast of the park
entrance at West Glacier
Glacier National Park
Flathead County
Montana

HAER No. MT-83

PHOTOGRAPHS
WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
Department of the Interior
Washington, DC 20013-7127

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HISTORIC AMERICAN ENGINEERING RECORD

GOLDEN STAIRS RETAINING WALL
HAER MT-83

Location: Beneath Going-to-the-Sun Road, approximately forty-three miles northeast of the park entrance at West Glacier, Glacier National Park, Glacier County, Montana
UTM: Rising Sun Quad. 12/314100/5395800

Date of Construction: 1933

Structural Type: Stone masonry retaining wall

Contractor: A.R. Douglas, Kalispell, Montana

Engineer: Bureau of Public Roads

Owner: Glacier National Park

Use: Retaining wall

Significance: The Golden Stairs Retaining Wall is one of approximately seventeen prominent masonry and concrete structures on Going-to-the-Sun Road in Glacier National Park. The 51-mile stretch of scenic road is significant as a unique engineering accomplishment of the early twentieth century, and as the first product of a 1925 cooperative agreement between the National Park Service and the Bureau of Public Roads. As with other structures on the road, the retaining wall was constructed with native stone, in an attempt to make it blend with the park scenery. The Golden Stairs Retaining Wall is one of the largest and most noticeable retaining walls along the entire road.

Project Information: Documentation of the Golden Stairs Retaining Wall is part of the Going-to-the-Sun Road Recording Project, conducted during the summer of 1990 under the co-sponsorship of HABS/HAER and Glacier National Park. Researched and written by Kathryn Steen, HAER Historian, 1990. Edited and transmitted by Lola Bennett, HAER Historian, 1992.

Going-to-the-Sun Road

The Golden Stairs Retaining Wall is one of the largest and most noticeable retaining walls along Going-to-the-Sun Road, a scenic park road that winds through the spectacular mountains and valleys in the middle of Glacier National Park. The 51-mile road, built in sections between 1911 and 1933, and rebuilt during the next two decades, runs east and west through the park. Starting in the west, the road runs from West Glacier, along the 10-mile eastern shore of Lake McDonald and then up McDonald Creek for an additional ten miles. About one mile beyond the junction with Logan Greek, the road begins its ascent to Logan Pass. The road climbs at a 6-percent grade, passes through a tunnel, and turns at a major switchback called the Loop. The road then follows the contours of the sides of Haystack Butte and Pollock Mountain, passing over several bridges, culverts and retaining walls before reaching Logan Pass. The road descends to the east along the sides of Piegan Mountain and Going-to-the-Sun Mountain before running along the north shore of St. Mary Lake. The road exits the park as it crosses Divide Creek near St. Mary.[1]

Significance of the Road

Going-to-the-Sun Road is significant as an outstanding engineering feat of the early twentieth century. In addition, the road was the first product of the interagency cooperative agreement between the National Park Service (NPS) and the Bureau of Public Roads (BPR). The agreement, signed in 1925, allowed the National Park Service to utilize the roadbuilding expertise of the Bureau of Public Roads while still retaining control to protect the landscape.[2]

Golden Stairs Retaining Wall

In late 1932, automobiles could drive across the entire fifty-one miles of Going-to-the-Sun Road. Even as they noted their achievement, however, the BPR and NPS had plans for major reconstruction on the parts of the road built before 1925. About twenty miles on the west end and eight miles on the east end of the road had narrower roadways, tighter curves, and log structures. Most of the improvement on the eastern eight miles was included in a contract to A.R. Douglas of Kalispell. Douglas won the contract with a low bid of $80,468.86 and began construction in the spring of 1933.[3]

Douglas set up his camp at Rose Creek and began work immediately in the area of the Golden Stairs. The Golden Stairs are cliffs formed by the Lewis Overthrust, a type of fault, and named after the song "Glimbing Up the Golden Stairs."[4] The contractor first drilled holes for explosives in the cliffs above the roadway. In July, Douglas started to blast rock out of the mountainside. Not only would the excavated rock allow a wider roadway, but the rock excavated at the Golden Stairs provided stone for the masonry work on Douglas' contract. Douglas first utilized the rock on the 42' long Rose Greek Bridge, and then on the Golden Stairs Retaining Wall.[5]

In August, the contractor began the retaining walls in earnest. Because

he blocked traffic for several hours each day, he worked his labor force hard to complete the retaining walls in five weeks. Douglas placed 788 cubic yards of masonry in a distance of 550' near the cliffs of the Golden Stairs. Douglas used a crane converted from a power shovel to assist in moving the rock.[6]

Description

The Golden Stairs retaining wall consists primarily of two major sections of wall. The wall, composed of 788 cubic yards of masonry, appears to be about 20'-30' deep. The masonry is a buff-colored limestone excavated from the cuts on the roads.

ENDNOTES

1. See the Historic American Engineering Record report HAER MT-67 on the Going-to-the-Sun Road.

2. C.H. Purcell, F.A. Kittredge, J.A. Elliott, T.C. Vint, and C.J. Kraebel, Suggested Procedure for Cooperation Between the National Park Service and the Bureau of Public Roads in Major Traffic-Way Projects Within the National Parks, April 22, 1925 (Record Group 79, National Archives, Washington, D.G.)

3. A.V. Emery, "Final Construction Report (1933-1934) on Transmountain Highway, East Side, Logan Pass-St. Mary Junction, Grading, Project No. E-1-E2," (Glacier National Park Library Historical Files).

4. Jack Holterman, Place Names of Glacier/Waterton National Parks (West Glacier, Montana: Glacier Natural History Association, 1985), pp. 56, 75.

5. Emery, "Final Construction Report."

6. Emery, "Final Construction Report."

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